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INTELLECTUAL PROPERTY LAW AND RELATED MATTERS

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December 21, 2005

Via Facsimile 571.273.8300

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Re: Serial No.: 10/624,109  
Apparatus and Method for Monitoring a Treatment Process in a Production Interval  
Art Unit: 3672  
Our File: 1301-1135

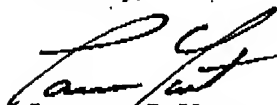
Dear Sir:

Enclosed for filing please find the following items (7 + 1 pages) relating to the above-identified application:

- (1) Notice of Appeal (1 page)
- (2) Pre Appeal Brief Request for Review (5 page); and
- (3) Form PTO-2038 (1 page).

If you have any questions or comments concerning this matter, please call the undersigned at your earliest convenience. Otherwise, please accept the enclosed.

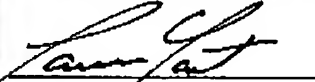
Sincerely,



Lawrence R. Youst  
Reg. No. 38,795  
Enclosures

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I hereby certify that this correspondence is being transmitted by facsimile to the United States Patent and Trademark Office on December 21, 2005.

  
Lawrence R. Youst

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Halliburton Docket No.: 2001-IP-003050 UI USA  
Attorney Docket No.: 1301-1135

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re Application: David E. McMechan et al.  
Serial No.: 10/624,109  
Filed: July 21, 2003  
Art Unit: 3672  
Confirmation No.: 6120  
Examiner: Letoria G. House  
For: Apparatus and Method for Monitoring a Treatment Process in a  
Production Interval

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Pre Appeal Brief Request for Review**

Dear Sir:

This Request is being filed in connection with a Notice of Appeal.

**Status**

Claims 1-49 are presently pending of which claims 1, 12, 22 and 36 are in independent form with claims 2-11, 13-21, 23-35 and 37-49 respectively dependent therefrom. The Examiner has rejected claims 1, 8-12, 18-27, 29 and 31-49 under 35 U.S.C. §102(e) as being anticipated by Wetzel et al., U.S. Patent No. 6,817,410 (hereinafter "Wetzel"). The Examiner has rejected claims 12-21 and 36-49 under 35 U.S.C. §102(b) as being anticipated by Quigley et al., U.S. Patent No. 6,004,639 (hereinafter "Quigley"). The Examiner has rejected claims 1-11 and 22-35 under 35 U.S.C. §103(a) as being obvious over Quigley in view of Fisher et al., U.S. Patent No. 6,554,065 (hereinafter "Fisher"). The Examiner has rejected claims 28 and 30 under 35 U.S.C. §103(a) as being anticipated by Wetzel. (See 9/28/05 Office Action).

**Independent Claims 1, 12, 22 and 36 Are Not Anticipated by Wetzel**

Independent claims 1, 12, 22 and 36 have been rejected as being anticipated by Wetzel, but this reference does not teach, either expressly or inherently, each and every element as set forth in the claims as required to establish anticipation. (See MPEP §2131). Specifically, neither the applicant nor the Examiner has identified within Wetzel the explicitly-recited limitation in each of claims 1, 12, 22 and 36 relating to regulating a characteristic of the treatment fluid **during the treatment process** based upon the data collected by a sensor during the treatment process.

The Examiner has cited column 10, lines 16-34 of Wetzel for this teaching (See 9/28/05 Office Action, page 3). A careful review of this excerpt as well as the entire disclosure of Wetzel, reveals no teaching of regulating a characteristic of the treatment fluid **during the treatment process**. While Wetzel describes an intelligent completion including gauges, sensors, valves and sampling devices including temperature sensors, pressure sensors, flow-control devices and flow rate measurement devices, these sensors are not used to collect data that is used to make adjustments to the treatment fluid **during the treatment process**. In fact, Wetzel specifically states that **after the treatment process** is complete the sensor data is used to determine what, if any, remedial action must be taken. (See Wetzel, column 9, line 56 - column 10, line 24; See 7/12/05 Response, pages 18-22). This type of remediation following a treatment process is exactly the problem solved by the present invention which enables real time adjustments to the treatment fluid **during the treatment process**. (See Application Paragraphs [0007] and [0008]). Accordingly, Wetzel fails to teach at least one limitation explicitly recited in each of claims 1, 12, 22 and 36.

**Independent Claims 12 and 36 Are Not Anticipated by Quigley**

Independent claims 12 and 36 have been rejected as being anticipated by Quigley, but this reference does not teach, either expressly or inherently, each and every element as set forth in the claims as required to establish anticipation. (See MPEP §2131). Specifically, neither the applicant nor the Examiner has identified within Quigley the explicitly-recited limitation in each of claims 12 and 36 relating to regulating a characteristic of the treatment fluid **during the treatment process** based upon the data collected by a sensor during the treatment process.

The Examiner has cited figure 1 and columns 9-12 of Quigley for this teaching. (See 9/28/05 Office Action, page 4). A careful review of this excerpt as well as the entire disclosure of Quigley, reveals no teaching of regulating a characteristic of the treatment fluid **during the treatment process**. While Quigley describes sensors that identify physical characteristics including acoustic sensors, optical sensors, mechanical sensors, electrical sensors, fluidic sensors, pressure sensors, temperature sensors, strain sensors and chemical sensors, none of these sensors are used to collect data for making real time adjustments to a treatment fluid **during a treatment process**. In fact, Quigley fails to disclose any treatment process much less making real time adjustments to a treatment fluid **during the treatment process**. (See Quigley; See 7/12/05 Response, pages 22-29). Moreover, the examiner has acknowledged the Quigley fails to teach this limitation. (See discussion below). Accordingly, Quigley fails to teach at least one limitation explicitly recited in each of claims 12 and 36.

**Independent Claims 1 and 22 are Patentable over Quigley and Fisher**

Independent claims 1 and 22 have been rejected as being obvious over Quigley in view of Fisher, but these references, either alone or in combination, do not teach or suggest all the claim limitations recited in the claims as required to establish a *prima facie* case of obviousness. (See MPEP §2143). Specifically, neither Quigley nor Fisher, either alone or in combination, teaches, suggests or discloses the explicitly-recited limitation in each of claims 1 and 22 relating to regulating a characteristic of the treatment fluid **during the treatment process** based upon the data collected by a sensor during the treatment process.

As stated above, Quigley does not teach this limitation. Fisher teaches a post gravel pack determination relating to the effectiveness of the gravel pack process. Not only does Fisher fail to teach altering a characteristic of a treatment fluid **during a treatment process** but Fisher also fails to teach the use of sensors to collect data **during the treatment process**. Both of these steps take place **after the treatment process** is complete.

In addition, the examiner has acknowledged that neither Quigley nor Fisher teaches this limitation. In reply to the 7/12/05 Response filed by the applicant, the Examiner stated that:

The applicant has argued that Wetzel and in combined with Quigley et al. and Fisher do not teach of controlling and altering a characteristic of a treatment fluid during a treatment process based upon data being collected during the treatment process. However, in column 10, lines 16-34, Wetzel states that the fiber optic sensors are used to determine the placement of the treatment as well as other well characteristics during the well injection and that remedial action may be taken if the desired results are not achieved. Quigley et al. (column 3, lines 43-49) and Fisher (column 5, lines 1-10) also teach of various types of sensor for identifying and monitoring downhole conditions. It's obvious that the sensors are attached to the tool to collect data as the slurry is being pumped in to the well, so that one on surface can control the slurry temperature, pressure, viscosity, flow rate, and etc during the treatment process. It would have been obvious to one of ordinary in the art at the time of the invention was made to have use the apparatus and method for packing a well taught by Quigley et al. and Fisher in combination with the intelligent well system taught by Wetzel to monitor and regulate the characteristics of the treatment fluid as being pumped in the well. (See 9/28/05 Office Action; pages 8-9).

It is clear from the Examiner's analysis that Quigley and Fisher do not teach regulating a characteristic of the treatment fluid **during the treatment process** based upon the data collected by a sensor during the treatment process. It is also clear that it is only in combination with Wetzel that the Examiner arrives at the conclusion that this limitation is taught. As such, the Examiner has failed to provide any factual basis for the contention that the combination of Quigley and Fisher teaches or suggests the limitation relating to regulating a characteristic of the treatment fluid **during the treatment process** based upon the data collected by a sensor during the treatment process. Accordingly, the Examiner has failed to show that the combination of cited references teaches or suggests all the claim limitations of claims 1 and 22, as required to establish a *prima facie* case of obviousness.

In addition, the Examiner contents that the applicant has made arguments relating to Wetzel in combined with Quigley and Fisher. The applicant has made no such argument as there has been no rejection based upon this combination of references. Nonetheless, for the reasons stated above, even if the teachings of these references were to be combined, the present invention as claimed in each of claims 1, 12, 22 and 36 would be patentable. Specifically, neither Wetzel, Quigley nor Fisher teaches, suggests or discloses the limitation relating to regulating a characteristic of the treatment fluid **during the treatment process** based upon the data collected by a sensor during the treatment process. Accordingly, even if such a combination of references were used in a rejection,

these references fail to teach or suggest all the claim limitations of claims 1, 12, 22 and 36, as required to establish a *prima facie* case of obviousness.

**Claims 28 and 30 Are Patentable Over Wetzel**

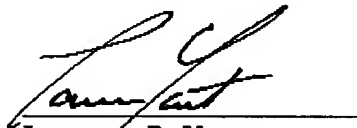
The Examiner has rejected claims 28 and 30 under 35 U.S.C. §103(a) as being anticipated by Wetzel. While the applicant is unclear as to the basis for an anticipation rejection under 35 U.S.C. §103(a), based upon the reasons stated above, claims 28 and 30 are neither anticipated nor rendered obvious by Wetzel.

**Conclusion**

In view of the forgoing, the Panel is respectfully requested to allow independent claims 1, 12, 22 and 36 as well as claims 2-11, 13-21, 23-35 and 37-49 that are respectively dependent therefrom.

Dated this 21st day of December, 2005.

Respectfully submitted:



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